```
$%^STN;HighlightOn= ***;HighlightOff=*** ;
Connecting via Winsock to STN
Welcome to STN International! Enter x:x
LOGINID:SSSPTA1600RKK
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
                    Welcome to STN International
 * * * * * * * *
NEWS 1
                  Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Apr 08
                 "Ask CAS" for self-help around the clock
NEWS 3 Jun 03 New e-mail delivery for search results now available
NEWS 4 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 5 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
                 now available on STN
NEWS 6 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 7 Sep 03 JAPIO has been reloaded and enhanced
NEWS 8 Sep 16 Experimental properties added to the REGISTRY file
NEWS 9 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 10 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11 Oct 24 BEILSTEIN adds new search fields
NEWS 12 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 13 Nov 18 DKILIT has been renamed APOLLIT
NEWS 14 Nov 25 More calculated properties added to REGISTRY
NEWS 15 Dec 04 CSA files on STN
NEWS 16 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 17 Dec 17 TOXCENTER enhanced with additional content
NEWS 18 Dec 17 Adis Clinical Trials Insight now available on STN
NEWS 19 Jan 29 Simultaneous left and right truncation added to COMPENDEX,
                 ENERGY, INSPEC
NEWS 20 Feb 13 CANCERLIT is no longer being updated NEWS 21 Feb 24 METADEX enhancements
NEWS 22 Feb 24 PCTGEN now available on STN
NEWS 23 Feb 24 TEMA now available on STN
NEWS 24 Feb 26 NTIS now allows simultaneous left and right truncation
NEWS 25 Feb 26 PCTFULL now contains images
NEWS 26 Mar 04 SDI PACKAGE for monthly \bar{\text{delivery}} of multifile SDI results
NEWS 27 Mar 19 APOLLIT offering free connect time in April 2003
NEWS 28 Mar 20 EVENTLINE will be removed from STN
NEWS 29 Mar 24 PATDPAFULL now available on STN
NEWS 30 Mar 24 Additional information for trade-named substances without
                 structures available in REGISTRY
NEWS 31 Mar 24 Indexing from 1957 to 1966 added to records in CA/CAPLUS
NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
              MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
              AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
              STN Operating Hours Plus Help Desk Availability
NEWS HOURS
NEWS INTER
              General Internet Information
```

NEWS LOGIN Welcome Banner and News Items

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 15:57:33 ON 10 APR 2003

=> file agricola biosis embase caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'AGRICOLA' ENTERED AT 15:57:45 ON 10 APR 2003

FILE 'BIOSIS' ENTERED AT 15:57:45 ON 10 APR 2003 COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'EMBASE' ENTERED AT 15:57:45 ON 10 APR 2003 COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved.

FILE 'CAPLUS' ENTERED AT 15:57:45 ON 10 APR 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> s spinach and transform? and agrobacterium and apical
L1 3 SPINACH AND TRANSFORM? AND AGROBACTERIUM AND APICAL

=> d l1 1-3

L1 ANSWER 1 OF 3 AGRICOLA

AN 1998:63490 AGRICOLA

DN IND21380124

TI Shoot regeneration from cultured root explants of ***spinach***
(Spinacia oleracea L.): a system for ***Agrobacterium***

transformation .

AU Knoll, K.A.; Short, K.C.; Curtis, I.S.; Power, J.B.; Davey, M.R.

AV DNAL (QK725.P54)

SO Plant cell reports, Dec 1997. Vol. 17, No. 2. p. 96-101 Publisher: Berlin, W. Ger. : Springer International. CODEN: PCRPD8; ISSN: 0721-7714

NTE Includes references

CY Germany

DT Article

- FS Non-U.S. Imprint other than FAO LA English
- L1 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- AN 1998:83806 BIOSIS
- DN PREV199800083806
- TI Shoot regeneration from cultured root explants of ***spinach***
 (Spinacia oleracea L.): A system for ***Agrobacterium***

 transformation
- AU Knoll, K. A.; Short, K. C.; Curtis, I. S.; Power, J. B.; Davey, M. R. (1)
- CS (1) Plant Genetic Manipulation Group, Dep. Life Sci., Univ. Nottingham, University Park, Nottingham NG7 2RD UK
- SO Plant Cell Reports, (Dec., 1997) Vol. 17, No. 2, pp. 96-101. ISSN: 0721-7714.
- DT Article
- LA English
- L1 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
- AN 1998:42749 CAPLUS
- DN 128:86537
- TI Shoot regeneration from cultured root explants of ***spinach***
 (Spinacia oleracea). A system for ***Agrobacterium***

 transformation
- AU Knoll, K. A.; Short, K. C.; Curtis, I. S.; Power, J. B.; Davey, M. R.
- CS Dep. Life Sciences, Nottingham Trent Univ., Nottingham, NG11 8NS, UK
- SO Plant Cell Reports (1997), 17(2), 96-101 CODEN: PCRPD8; ISSN: 0721-7714
- PB Springer-Verlag
- DT Journal
- LA English

=> d l1 ab

- L1 ANSWER 1 OF 3 AGRICOLA
- AB A reliable plant regeneration system is described for the production of adventitious shoots from root explants of ***spinach*** . Explants from roots of axenic shoots and roots induced on cultured hypocotyl explants were used for adventitious shoot induction. Explants from , middle and basal root regions were incubated on Nitsch and Nitsch medium supplemented with alpha-naphthaleneacetic acid, gibberellic acid and kinetin. Optimum shoot regeneration was from explants of ***apical*** and middle root regions on medium with 20 micromolar alphanaphthaleneacetic acid and 5.0 micromolar gibberellic acid. Shoots originated directly from root tissues without an intervening callus phase. Adventitious shoots were rooted and were grown to maturity in the glasshouse. This plant regeneration procedure has been exploited in preliminary studies of ***Agrobacterium*** -mediated ***transformation***
- => s spinach and transform? and agrobacterium L2 44 SPINACH AND TRANSFORM? AND AGROBACTERIUM
- => dplicate remove 12
 DPLICATE IS NOT A RECOGNIZED COMMAND
 The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>). => n N IS NOT A RECOGNIZED COMMAND The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>). => duplicate remove 12 DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, CAPLUS' KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n PROCESSING COMPLETED FOR L2 33 DUPLICATE REMOVE L2 (11 DUPLICATES REMOVED) => d 13 1-10 ANSWER 1 OF 33 CAPLUS COPYRIGHT 2003 ACS 2003:77615 CAPLUS AN DN 138:148733 Gene controlling fruit size and cell division in plants INTanksley, Steven D. PAUSA SO U.S. Pat. Appl. Publ., 35 pp. CODEN: USXXCO DTPatent LA English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE _ _ _ _ _____ -----US 2003024013 A1 20030130 US 2001-898659 20010703 PRAI US 2000-215824P P 20000705 L3 ANSWER 2 OF 33 CAPLUS COPYRIGHT 2003 ACS AN 2002:716499 CAPLUS DN 137:244849 Use of Arabidopsis thaliana tps1 gene encoding trehalose-6-phosphate synthase as selection markers for transgenic plants with improved stress resistance IN Thevelein, Johan; Leyman, Barbara; Van Dijck, Patrick; Avonce, Nelson; Iturriaga, Gabriel K.U. Leuven Research & Development, Belg. PΑ PCT Int. Appl., 39 pp. CODEN: PIXXD2 DTPatent LA English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------------PΙ WO 2002072849 A2 20020919 WO 2002-EP818 20020103 WO 2002072849 A3 20030206 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,

RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,

UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

```
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI GB 2001-105
                      Α
                           20010104
     ANSWER 3 OF 33 CAPLUS COPYRIGHT 2003 ACS
L3
AN
     2002:158008 CAPLUS
DN
     136:211940
     Nucleic acid sequence of novel genetic vector and methods for plant gene
TI
IN
     Baulcombe, David Charles; Martin-Hernandez, Ana Montserrat
     Plant Bioscience Limited, UK
PA
     PCT Int. Appl., 72 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
     -------
                                         -----
     WO 2002016622
                    A1 20020228
                                        WO 2001-GB3623 20010813
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2001078598
                    A5
                           20020304
                                       AU 2001-78598 20010813
PRAI GB 2000-20320
                      A
                           20000817
     WO 2001-GB3623
                      W
                           20010813
             THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 6
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 4 OF 33 CAPLUS COPYRIGHT 2003 ACS
L3
AN
     2002:655135 CAPLUS
DN
     137:196741
ΤI
     Constitutive and inducible promoters of .alpha.-tubulin and phenylalanine
     ammonia lyase genes from coffee plants
IN
     Aldwinckle, Herbert S.; Gaitan, Alvaro L.
PΑ
     Cornell Research Foundation, Inc., USA
SO
    U.S., 48 pp.
     CODEN: USXXAM
DT
    Patent
LA
    English
FAN.CNT 1
     PATENT NO.
                   KIND DATE
                                         APPLICATION NO. DATE
     -----
                          -----
    US 6441273
                     B1
                           20020827
                                        US 2000-545686 20000407
PRAI US 2000-184934P P
                           20000208
            THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 26
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L3
    ANSWER 5 OF 33 CAPLUS COPYRIGHT 2003 ACS
```

AN

DN

2002:685043 CAPLUS

137:205835

```
TI ***Transformed*** plant having durability to heavy metals and capability of heavy metal removal
```

IN Saito, Kazutoshi; Noji, Masaaki; Nakamura, Michiyoshi

PA Japan Science and Technology Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 2002253072 A2 20020910 JP 2001-60795 20010305

PRAI JP 2001-60795 20010305

L3 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2003 ACS

AN 2002:847553 CAPLUS

DN 137:366671

TI Increasing the flavonoid content of fruits by coexpression of foreign genes for chalcone synthase and flavonol synthase

IN Colliver, Steve Peter; Hughes, Stephen Glyn; Muir, Shelagh Rachael; Verhoeyen, Martine Elisa; Van Tunen, Adrianus Johannes

PA Unilever PLC, UK; Unilever N.V.

SO Eur. Pat. Appl., 71 pp. CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE --------------EP 1254960 A1 20021106 PIEP 2002-252967 20020426 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT. IE, SI, LT, LV, FI, RO, MK, CY, AL, TR PRAI EP 2001-304009 20010502 A

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 7 OF 33 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
- AN 2002:375926 BIOSIS
- DN PREV200200375926
- TI Synthesis of a novel class of polyhydroxyalkanoates in Arabidopsis peroxisomes, and their use in monitoring short-chain-length intermediates of beta-oxidation.
- AU Arai, Yuko; Nakashita, Hideo (1); Suzuki, Yoshikatu; Kobayashi, Yumiko; Shimizu, Toshiyuki; Yasuda, Michiko; Doi, Yoshiharu; Yamaguchi, Isamu
- CS (1) RIKEN Institute, 2-1 Hirosawa, Wako-shi, Saitama, 351-0198: nakashi@postman.riken.go.jp Japan
- Plant and Cell Physiology, (May, 2002) Vol. 43, No. 5, pp. 555-562. http://www.pcp.oupjournals.org/. print. ISSN: 0032-0781.
- DT Article
- LA English
- L3 ANSWER 8 OF 33 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2
- AN 2002:515559 BIOSIS
- DN PREV200200515559

```
TI
     Explants of Ri- ***transformed*** hairy roots of ***spinach***
     develop embryogenic calli in the absence of gibberellic acid, an essential
     growth regulator for induction of embryogenesis from non-
       ***transformed***
                           roots.
     Ishizaki, Takuma (1); Hoshino, Yoichiro; Masuda, Kiyoshi; Oosawa, Katsuji
ΑU
     (1) Graduate School of Agriculture, Hokkaido University, Sapporo,
CS
     060-8589: gohho@res.agr.hokudai.ac.jp Japan
     Plant Science (Shannon), (August, 2002) Vol. 163, No. 2, pp. 223-231.
SO
     http://www.elsevier.com/locate/plantsci. print.
     ISSN: 0168-9452.
DT
     Article
     English
LA
L3
     ANSWER 9 OF 33 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN
     2003:15534 BIOSIS
DN
     PREV200300015534
     Strategies to deal with the concern about marker genes in transgenic
TI
     plants: Some environment-friendly approaches.
     Jaiwal, Pawan K. (1); Sahoo, Lingaraj; Singh, N. Dolendro; Singh, Rana P.
ΑU
CS
     (1) Department of Biosciences, Maharshi Dayanand University, Rohtak, 124
     001, India: pkjaiwal@yahoo.com India
SO
     Current Science (Bangalore), (25 July 2002) Vol. 83, No. 2, pp. 128-136.
     print.
     ISSN: 0011-3891.
     Article
DT
     English
LA
     ANSWER 10 OF 33 CAPLUS COPYRIGHT 2003 ACS
ΑN
     2001:693528 CAPLUS
DN
     135:268166
     S-adenosyl-L-methionine:phosphoethanolamine N-methyltransferase
TI
     compositions and methods for modulating lipid biosynthesis in transgenic
IN
     Hanson, Andrew D.; Nuccio, Michael L.; Henry, Susan A.
PA
     University of Florida, USA; Carnegie Mellon University
     PCT Int. Appl., 158 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                                           -----
     WO 2001068870
PΙ
                      A2
                            20010920
                                           WO 2001-US8352
                                                            20010315
     WO 2001068870
                      A3
                            20020321
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
            HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 2000-525885
                      Α
                           20000315
RE.CNT
             THERE ARE 280 CITED REFERENCES AVAILABLE FOR THIS RECORD
       280
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
```

```
=> d 13 11-20
L3
     ANSWER 11 OF 33 CAPLUS COPYRIGHT 2003 ACS
     2000:335577 CAPLUS
AN
     133:2629
DN
     Proteins eliciting a hypersensitive response from ***Agrobacterium***
TI
     vitis and the genes encoding them and their uses
     Burr, Thomas J.; Herlache, Thomas C.; Zhang, Hongsheng
IN
     Cornell Research Foundation, Inc., USA
PΑ
SO
     PCT Int. Appl., 157 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
     -----
                     ----
                           -----
                                          -----
     WO 2000028056 A2
                           20000518
                                         WO 1999-US26079 19991105
     WO 2000028056
                     A3
                           20001005
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS.
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                      A2 20010829
                                        EP 1999-961589 19991105
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT.
             IE, SI, LT, LV, FI, RO
PRAI US 1998-107387P P
                           19981106
     WO 1999-US26079
                     W
                           19991105
L3
     ANSWER 12 OF 33 AGRICOLA
                                                       DUPLICATE 3
     1999:75923 AGRICOLA
DN
     IND22010485
ΤI
     An efficient
                  ***Agrobacterium***
                                         tumefaciens-mediated
       ***transformation*** and regeneration system for cotyledons of
       ***spinach***
                      (Spinacia oleracea L.).
ΑU
     Zhang, H.X.; Zeevaart, J.A.D.
     Michigan State University, East Lansing.
CS
     Plant cell reports, Mar 1999. Vol. 18, No. 7/8. p. 640-645
     Publisher: Berlin, W. Ger. : Springer International.
     CODEN: PCRPD8; ISSN: 0721-7714
    Includes references
NTE
CY
    Germany
DT
    Article
FS
    Non-U.S. Imprint other than FAO
LA
    English
L3
    ANSWER 13 OF 33 AGRICOLA
                                                      DUPLICATE 4
AN
    1999:2259 AGRICOLA
```

Characterization of a gene for ***spinach*** CAP160 and expression of

two ***spinach*** cold-acclimation proteins in tobacco.

Kaye, C.; Neven, L.; Hofig, A.; Li, Q.B.; Haskell, D.; Guy, C.

DN

ΤI

ΑU

IND21811119

```
Centre de Cooperation Internationale en Recherche Agronomique pour la
     Developpement, Montpellier, France.
ΑV
     DNAL (450 P692)
SO
     Plant physiology, Apr 1998. Vol. 116, No. 4. p. 1367-1377
     Publisher: Rockville, MD: American Society of Plant Physiologists, 1926-
     CODEN: PLPHAY; ISSN: 0032-0889
NTE Includes references
     Maryland; United States
CY
     Article; Conference
DT
FS
     U.S. Imprints not USDA, Experiment or Extension
LA
     English
L3
     ANSWER 14 OF 33 CAPLUS COPYRIGHT 2003 ACS
AN
     1998:540354 CAPLUS
DN
     130:917
ΤI
     Expression of
                     ***spinach***
                                      betaine aldehyde dehydrogenase gene in
     transgenic tobacco plants
ΑU
     Liang, Zheng; Ma, Deqin; Tang, Lan; Hong, Yiguo; Luo, Ailing; Dai, Xiuyu
CS
     Institute of Botany, Academia Sinica, Beijing, 100093, Peop. Rep. China
SO
     Shengwu Gongcheng Xuebao (1997), 13(3), 236-240
     CODEN: SGXUED; ISSN: 1000-3061
PΒ
     Kexue Chubanshe
DΤ
     Journal
LA
     Chinese
L3
     ANSWER 15 OF 33 AGRICOLA
                                                         DUPLICATE 5
AN
     97:76850 AGRICOLA
DN
     IND20600220
     Transgenic
                  ***spinach***
                                  plants expressing the coat protein of
     cucumber mosaic virus.
ΑU
     Yang, Y.M.; Al-Khayri, J.M.; Anderson, E.J.
CS
     University of Arkansas, Fayetteville, AR.
ΑV
     DNAL (QK725.I43)
SO
     In vitro cellular & developmental biology. Plant : journal of the Tissue
     Culture Association, July/Sept 1997. Vol. 33, No. 3. p. 200-204
     Publisher: Columbia, MD : Society for In Vitro Biology.
     CODEN: IVCPEO; ISSN: 1054-5476
NTE Includes references
CY
     Maryland; United States
DT
     Article
FS
     U.S. Imprints not USDA, Experiment or Extension
     English
LΑ
L3
     ANSWER 16 OF 33 AGRICOLA
                                                        DUPLICATE 6
AN
     1998:63490 AGRICOLA
DN
     IND21380124
TI
     Shoot regeneration from cultured root explants of
                                                         ***spinach***
     (Spinacia oleracea L.): a system for ***Agrobacterium***
       ***transformation***
     Knoll, K.A.; Short, K.C.; Curtis, I.S.; Power, J.B.; Davey, M.R.
ΑU
ΑV
     DNAL (QK725.P54)
     Plant cell reports, Dec 1997. Vol. 17, No. 2. p. 96-101
SO
     Publisher: Berlin, W. Ger. : Springer International.
     CODEN: PCRPD8; ISSN: 0721-7714
NTE Includes references
CY
     Germany
```

Article

```
Non-U.S. Imprint other than FAO
LA
     English
L3
     ANSWER 17 OF 33 CAPLUS COPYRIGHT 2003 ACS
     1996:371936 CAPLUS
AN
DN
     125:27695
TI
     Aldehyde dehydrogenase selectable markers for plant ***transformation***
IN
     Ursin, Virginia M.
     Calgene, Inc., USA
PA
     PCT Int. Appl., 21 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                        APPLICATION NO. DATE
     -----
                     ----
                           _____
                                         -----
                                                         -----
PΙ
     WO 9612029
                     A1
                           19960425
                                        WO 1995-US13079 19951012
         W: CA, JP, MX
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     US 5633153
                           19970527
                      Α
                                         US 1994-324130
                                                         19941014
     EP 800583
                      A1
                           19971015
                                         EP 1995-937425
                                                          19951012
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
PRAI US 1994-324130
                           19941014
     WO 1995-US13079
                           19951012
L3
     ANSWER 18 OF 33 CAPLUS COPYRIGHT 2003 ACS
AN
     1995:795252 CAPLUS
DN
     123:221349
ΤI
     Molecular cloning and sequence analysis of a ***spinach***
     2-oxoglutarate/malate-translocator protein cDNA and manipulation of
     plasmids, bacteria, yeasts and plants containing the translocator
IN
     Fluegge, Ulf-Ingo; Weber, Andreas; Fischer, Karsten
PΑ
     Germany
SO
     Ger., 23 pp.
     CODEN: GWXXAW
DТ
     Patent
LΑ
     German
FAN.CNT 1
     PATENT NO.
                   KIND DATE
                                       APPLICATION NO. DATE
     -----
                                         -----
                                                         -----
                    C1
PΙ
    DE 4420782
                          19950817
                                         DE 1994-4420782 19940615
     CA 2192849
                     AA
                          19951221
                                         CA 1995-2192849 19950614
     WO 9534654
                    A1
                          19951221
                                         WO 1995-EP2319
                                                         19950614
        W: AU, CA, HU, JP, KR, RU, US
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
    AU 9527924
                      Α1
                          19960105
                                         AU 1995-27924
                                                        19950614
    AU 708654
                      B2
                          19990812
                     A1
                          19970402
                                         EP 1995-923329
                                                         19950614
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
    HU 76090
                     A2
                          19970630
                                        HU 1996-3441 19950614
    JP 09512178
                     T2
                          19971209
                                         JP 1995-501650
                                                       19950614
    RU 2188866
                     C2 20020910
                                        RU 1997-100777 19950614
    US 5981219
                     Α
                          19991109
                                        US 1996-750723
                                                         19961212
    US 6225526
                     B1 20010501
                                        US 1998-191275
                                                         19981112
PRAI DE 1994-4420782 A 19940615
WO 1995-EP2319 W 19950614
    US 1996-750723 A3 19961212
```

FS

```
1995:706890 CAPLUS
AN
     123:134977
DN
ΤI
     In planta expression of cDNA encoding 3-ketoacyl-acyl carrier protein
     synthase III (KAS III) from ***spinach***
ΑU
     Tai, Heeyoung; Jaworski, Jan G.
CS
     Department Chemistry, Miami University, Oxford, OH, USA
SO
     Plant Lipid Metabolism, [Papers presented at the International Meeting on
     Plant Lipids] -- 11th, Paris, June 26-July 1, 1994 (1995), Meeting Date
     1994, 72-4. Editor(s): Kader, Jean-Claude; Mazliak, Paul. Publisher:
     Kluwer, Dordrecht, Neth.
     CODEN: 610ZAO
DT
     Conference
LA
     English
L3
     ANSWER 20 OF 33 CAPLUS COPYRIGHT 2003 ACS
AN
     1995:328494 CAPLUS
DN
     122:125347
     Transgenic organisms containing improved starch yield by
TI
       ***transformation*** with ADP-glucose pyrophosphorylase cDNA
IN
     Villand, Per; Kleczkowski, Leszek; Olsen, Odd-Arne; Poulsen, Peter;
     Okkels, Finn; Marcussen, Jan
PΑ
    Danisco A/S, Den.
SO
    PCT Int. Appl., 87 pp.
    CODEN: PIXXD2
DT
    Patent
    English
LA
FAN.CNT 1
    PATENT NO.
                 KIND DATE
                                       APPLICATION NO. DATE
                     ----
                          -----
                                         -----
PI
    WO 9424292
                    A2
                           19941027
                                        WO 1994-EP1082 19940407
    WO 9424292
                     A3
                           19950601
        W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE,
            HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ,
            PL, PT, RO, RU, SD, SE, SI, SK, TJ, UA, US, UZ, VN
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
            BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
    CA 2160159
                     AA 19941027
                                       CA 1994-2160159 19940407
    AU 9465392
                      A1
                           19941108
                                         AU 1994-65392
                                                         19940407
    AU 693787
                      B2
                           19980709
    EP 693128
                     A1
                          19960124
                                         EP 1994-913121 19940407
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
    GB 2291878
                     A1
                          19960207
                                        GB 1995-20520
                                                         19940407
    GB 2291878
                     B2
                          19971210
    JP 08509121
                     T2
                          19961001
                                         JP 1994-522704
                                                         19940407
    US 5977437
                     A
                          19991102
                                         US 1996-535276
                                                         19960205
    US 6379968
                     B1
                          20020430
                                         US 1999-335234
                                                         19990617
PRAI GB 1993-7408
                     Α
                          19930408
    WO 1994-EP1082
                     W
                          19940407
    US 1996-535276
                     A1
                          19960205
```

ANSWER 19 OF 33 CAPLUS COPYRIGHT 2003 ACS

L3

^{=&}gt; s 13 and spinach(w)transform?

L4 0 L3 AND SPINACH(W) TRANSFORM?

^{=&}gt; s sugar(w)beet and transform? and agrobacterium

```
=> duplicate remove 15
DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L5
             81 DUPLICATE REMOVE L5 (23 DUPLICATES REMOVED)
=> s 16 and sugar(w)beet(w)transform?
            7 L6 AND SUGAR(W) BEET(W) TRANSFORM?
=> d 17 1-7
     ANSWER 1 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN
     2002:658222 CAPLUS
DN
     137:196634
     Method for efficient ***transformation*** of soybean cotyledons by
     wounding and ***Agrobacterium*** tumefaciens vectors containing
     transgenes
IN
     Choi, Yang-Do; Seo, Hak-Soo; Song, Jong-Tae; Cheong, Jong-Joo; Lee,
     Jong-Seob; Koo, Yeon-Jong
PΑ
     Scigen Harvest Co., Ltd., S. Korea
     PCT Int. Appl., 39 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                 KIND DATE
                                        APPLICATION NO. DATE
                    ----
                          _____
                                         -----
    WO 2002066599
PΙ
                     A2
                           20020829
                                         WO 2002-KR232 20020214
    WO 2002066599 A3
                           20021128
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
            UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI KR 2001-7818
                    Α
                          20010216
    ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS
L7
AN
    2000:756880 CAPLUS
DN
    133:318276
TI
            ***transformation***
                                  method by embryo iniculation in the seed
IN
    Risacher, Thierry; Craze, Melanie
PA
    Rhobio, Fr.
    PCT Int. Appl., 46 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                   KIND DATE
                                        APPLICATION NO. DATE
                    ----
    -----
    WO 2000063398 A1 20001026 WO 2000-EP4177 20000419
PΙ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
```

```
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
             SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                       A1
                           20020116
                                         EP 2000-935000
                                                            20000419
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     BR 2000011140
                            20020226
                      Α
                                          BR 2000-11140
                                                            20000419
     JP 2002541853
                       T2
                            20021210
                                          JP 2000-612477
                                                            20000419
PRAI EP 1999-420097
                       Α
                            19990419
     WO 2000-EP4177
                      W
                            20000419
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L7
     ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS
     2000:666878 CAPLUS
AN
DN
     133:262304
     Arabidopsis thaliana chromosome centromere sequences and their use in DNA
TI
     constructs and vectors
     Preuss, Daphne; Copenhaver, Gregory; Keith, Kevin
IN
PA
     The University of Chicago, USA
SO
     PCT Int. Appl., 1451 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 2
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
     -----
                     ----
                           -----
                                          -----
     WO 2000055325
                     A2
                            20000921
                                          WO 2000-US7392
                                                           20000317
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     BR 2000009119
                      Α
                           20011226
                                         BR 2000-9119
     EP 1165792
                      A2
                            20020102
                                          EP 2000-916559
                                                           20000317
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, IE, FI
PRAI US 1999-125219P
                     Р
                            19990318
     US 1999-127409P
                      Ρ
                           19990401
     US 1999-134770P
                      Ρ
                           19990518
     US 1999-153584P
                      Ρ
                           19990913
    US 1999-154603P
                       Ρ
                           19990917
    US 1999-172493P
                      p
                           19991216
    WO 2000-US7392
                      W
                           20000317
L7
    ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN
    1994:553580 CAPLUS
DN
    121:153580
    The effects of acetosyringone and pH on ***Agrobacterium***
ΤI
```

```
***beet***
                   varieties
     Mian, Asad Jamil
AU
     Postgrad. Bot. Dep., Gov. S.E. Coll., Bahawalpur, India
CS
     Science International (Lahore) (1993), 5(3), 281-4
     CODEN: SINTE8; ISSN: 1013-5316
DT
     Journal
     English
LA
     ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS
L7
AN
     1994:1698 CAPLUS
     120:1698
DN
     Factors influencing T-DNA transfer in ***Agrobacterium*** -mediated
TТ
       ***transformation*** of
                                Jacq, Benoit; Lesobre, Oliver; Sangwan, Rajbir S.; Sangwan-Norreel,
     Brigitte S.
CS
     Lab. AEB, Univ. Picardie, Amiens, 80039, Fr.
SO
     Plant Cell Reports (1993), 12(11), 621-4
     CODEN: PCRPD8; ISSN: 0721-7714
DT
     Journal
LA
     English
L7
     ANSWER 6 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN
     1993:599030 CAPLUS
DN
     119:199030
TI
     Effect of antibiotics on the culture of sugar and fodder beet tissue
ΑU
     Yurkova, G. N.; Chugunkova, T. V.; Shevtsov, I. A.
CS
     Inst. Fiziol. Rast. Genet., Kiev, Ukraine
SO
     Tsitologiya i Genetika (1993), 27(2), 3-6
     CODEN: TGANAK; ISSN: 0564-3783
DТ
     Journal
LA
    Russian
1.7
    ANSWER 7 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN
    1990:435740 CAPLUS
DN
    113:35740
TI
    The molecular biology of plant growth control.
ΑU
    Ryan, Lucy Anne
    Counc. Natl. Academic Awards, London, UK
CS
     (1988) 252 pp. Avail.: Univ. Microfilms Int., Order No. BRDX87901
    From: Diss. Abstr. Int. B 1990, 50(11), 4853-4
DT
    Dissertation
LA
    English
=> s 17 and shoot
            3 L7 AND SHOOT
L8
=> d 18 1-3
    ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
L<sub>8</sub>
    2000:756880 CAPLUS
AN
DN
    133:318276
TI
            ***transformation***
                                  method by embryo iniculation in the seed
IN
    Risacher, Thierry; Craze, Melanie
PΑ
    Rhobio, Fr.
    PCT Int. Appl., 46 pp.
SO
```

```
CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                                        APPLICATION NO. DATE
     PATENT NO.
                     KIND DATE
                     ----
                                         -----
     WO 2000063398 A1 20001026
PΙ
                                        WO 2000-EP4177 20000419
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
             SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1171621
                      A1 20020116
                                       EP 2000-935000 20000419
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     BR 2000011140
                           20020226
                    Α
                                        BR 2000-11140
                                                          20000419
     JP 2002541853
                      T2
                           20021210
                                        JP 2000-612477
                                                          20000419
PRAI EP 1999-420097
                    Α
                           19990419
     WO 2000-EP4177
                   W
                           20000419
RE.CNT 6
             THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L8
     ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
AN
     1994:553580 CAPLUS
DN
     121:153580
     The effects of acetosyringone and pH on ***Agrobacterium***
       ***transformation*** vary according to different ***sugar***
       ***beet***
                   varieties
ΑU
     Mian, Asad Jamil
CS
     Postgrad. Bot. Dep., Gov. S.E. Coll., Bahawalpur, India
     Science International (Lahore) (1993), 5(3), 281-4
SO
     CODEN: SINTE8; ISSN: 1013-5316
DT
    Journal
LA
    English
    ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
L8
AN
    1993:599030 CAPLUS
DN
    119:199030
    Effect of antibiotics on the culture of sugar and fodder beet tissue
TI
ΑU
    Yurkova, G. N.; Chugunkova, T. V.; Shevtsov, I. A.
    Inst. Fiziol. Rast. Genet., Kiev, Ukraine
CS
    Tsitologiya i Genetika (1993), 27(2), 3-6
    CODEN: TGANAK; ISSN: 0564-3783
DТ
    Journal
LA
    Russian
=> d 17 4-5 ab
L7
    ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS
AB
    Explants of five
                     lines were co-cultivated
    with four ***Agrobacterium*** tumefaciens strains (C58, N2/73, A281,
    Ach5) under different conditions to assess the effects of acetosyringone
```

and medium pH on strain virulence as measured by callus induction. Marked
differences were obsd. in the response of various ***sugar*** ***beet*** lines to the four ***Agrobacterium*** strains at three

рН

AB

levels (5.2, 5.5, 5.8) when grown without acetosyringone. It was concluded that all lines except one exhibited good results for the induction of tumors, shoot regeneration and roots when co-cultivated with C58 and N2/73 strains of ***Agrobacterium***. Effective vir induction requires a medium with pH 5.8, although some strains also showed a good response at all pH levels used in the study e.g. C58. A dramatic complete necrosis was obsd. in all ***sugar*** - ***beet*** lines at all pH levels when co-cultivated with the same four ***Agrobacterium*** strains with the addn. of acetosyringone.

L7 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS

Agrobacterium -mediated ***transformation*** of ***sugar***

beet (Beta vulgaris) was investigated for T-DNA transfer

efficiency, using an intron contg. .beta.-glucuronidase gene. Preculture
and coculture of hypocotyl and cotyledon explants with acetosyringone upon
infection was studied. Seven seed lots which included several hundred
genotypes, were screened, and were all susceptible to T-DNA transfer but
with variable frequencies. Cotyledon explants were more readily

transformed than those from hypocotyls. ***Transformation***
frequency of hypocotyl explants increased with acetosyringone. Both
preculture treatment and acetosyringone improved ***transformation***
in cotyledon explants. Callus assayed with fluorometric procedures
confirmed that the GUS gene had been transferred into ***sugar***

beet

=> d 18 1-3 ab

L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS

AB A ***transformation*** method comprising inoculation and co-cultivation of a target tissue, from a target plant, with ***Agrobacterium*** , at a time when the target tissue is in its natural

plant environment, followed by generation of a transgenic plant via dedifferentiation and regeneration of the target tissue.

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS

AB Explants of five ***sugar*** ***beet*** lines were co-cultivated with four ***Agrobacterium*** tumefaciens strains (C58, N2/73, A281, Ach5) under different conditions to assess the effects of acetosyringone and medium pH on strain virulence as measured by callus induction. Marked differences were obsd. in the response of various ***sugar*** - ***beet*** lines to the four ***Agrobacterium*** strains at three

рН

levels (5.2, 5.5, 5.8) when grown without acetosyringone. It was concluded that all lines except one exhibited good results for the induction of tumors, ***shoot*** regeneration and roots when co-cultivated with C58 and N2/73 strains of ***Agrobacterium***. Effective vir induction requires a medium with pH 5.8, although some strains also showed a good response at all pH levels used in the study e.g. C58. A dramatic complete necrosis was obsd. in all ***sugar*** - ***beet*** lines at all pH levels when co-cultivated with the same four ***Agrobacterium*** strains with the addn. of acetosyringone.

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS Kanamycin at 100-200 .mu.g/mL inhibited rosette formation by fodder beet AB leaf petiole explants more than by ***sugar*** ***beet*** petiole explants. Thus, kanamycin may be used as marker at 100 .mu.g/mL in fodder beet and at 150 .mu.g/mL in ***sugar*** ***beet*** ***transformation*** . Callus formation was more sensitive to kanamycin ***shoot*** and rosette formation. Carbenicillin and claphoran at 500 .mu.g/mL decreased the frequency of callus formation 4- and 2-fold, resp., on nonselective media and inhibited ***shoot*** initiation less. Claphoran at 500 .mu.g/mL did not inhibit ***shoot*** ***beet*** explants on selective media with 150 by ***sugar*** .mu.g kanamycin/mL, where the frequency of rosette formation was .apprx.20%. Thus, claphoran may be used for ***Agrobacterium*** suppression in ***transformations*** using kanamycin.

=> d 19 1-3 ab

1.9 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS AB ***Explants*** of five ***sugar*** ***beet*** lines were co-cultivated with four ***Agrobacterium*** tumefaciens strains (C58, N2/73, A281, Ach5) under different conditions to assess the effects of acetosyringone and medium pH on strain virulence as measured by callus induction. Marked differences were obsd. in the response of various ***sugar*** - ***beet*** lines to the four ***Agrobacterium*** strains at three pH levels (5.2, 5.5, 5.8) when grown without acetosyringone. It was concluded that all lines except one exhibited good results for the induction of tumors, shoot regeneration and roots when co-cultivated with C58 and N2/73 strains of ***Agrobacterium*** Effective vir induction requires a medium with pH 5.8, although some strains also showed a good response at all pH levels used in the study e.g. C58. A dramatic complete necrosis was obsd. in all ***sugar*** ***beet*** lines at all pH levels when co-cultivated with the same four ***Agrobacterium*** strains with the addn. of acetosyringone.

ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS

Agrobacterium -mediated ***transformation*** of ***sugar***

beet (Beta vulgaris) was investigated for T-DNA transfer

efficiency, using an intron contg. .beta.-glucuronidase gene. Preculture

and coculture of hypocotyl and cotyledon ***explants*** with

acetosyringone upon infection was studied. Seven seed lots which included

several hundred genotypes, were screened, and were all susceptible to

T-DNA transfer but with variable frequencies. Cotyledon ***explants***

were more readily ***transformed*** than those from hypocotyls.

Transformation frequency of hypocotyl ***explants***

increased

with acetosyringone. Both preculture treatment and acetosyringone improved ***transformation*** in cotyledon ***explants*** . Callus assayed with fluorometric procedures confirmed that the GUS gene had been transferred into ***sugar*** ***beet*** .

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS

AB Kanamycin at 100-200 .mu.g/mL inhibited rosette formation by fodder beet

leaf petiole ***explants*** . Thus, kanamycin may be used as marker at 100 .mu.g/mL in fodder beet and at 150 .mu.g/mL in ***sugar*** ***beet*** ***transformation*** . Callus formation was more sensitive to kanamycin than shoot and rosette formation. Carbenicillin and claphoran at $500 \, .mu.g/mL$ decreased the frequency of callus formation 4- and 2-fold, resp., on nonselective media and inhibited shoot initiation less. Claphoran at 500 .mu.g/mL did not inhibit shoot formation by ***sugar*** 150 .mu.g kanamycin/mL, where the frequency of rosette formation was .apprx.20%. Thus, claphoran may be used for ***Agrobacterium*** suppression in ***transformations*** using kanamycin. => s 17 and tips 0 L7 AND TIPS => s 17 and meristem? 0 L7 AND MERISTEM? => s spinach(w)hypocotyl(w)segments 3 SPINACH(W) HYPOCOTYL(W) SEGMENTS => d 112 1-3 L12 ANSWER 1 OF 3 AGRICOLA 92:80729 AGRICOLA IND92045971 Shoot regeneration from ***spinach*** ***hypocotyl*** ***segments*** by short term treatment with 5,6-Dichloro-indole-3acetic acid. Mii, M.; Nakano, M.; Okuda, K.; Iizuka, M. Chiba University, Chiba, Japan DNAL (QK725.P54) Plant cell reports, 1992. Vol. 11, No. 2. p. 58-61 Publisher: Berlin, W. Ger. : Springer International. CODEN: PCRPD8; ISSN: 0721-7714 NTE Includes references. Article Non-U.S. Imprint other than FAO English L12 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. 1992:262503 BIOSIS BA93:138828 SHOOT REGENERATION FROM ***SPINACH*** ***HYPOCOTYL*** ***SEGMENTS*** BY SHORT TERM TREATMENT WITH 5 6 DICHLOROINDOLE-3-ACETIC ACID. MII M; NAKANO M; OKUDA K; IIZUKA M FAC. HORTICULTURE, CHIBA UNIV., 648 MATSUDO, CHIBA 271, JPN. PLANT CELL REP, (1992) 11 (2), 58-61. CODEN: PCRPD8. ISSN: 0721-7714. BA; OLD English

leaf petiole ***explants*** more than by ***sugar***

L10

L11

AN

DN

ΤI

ΑU

CS

ΑV

SO

DT

FS

LA

ΑN

DN

TI

ΑU CS

SO

FS

LA

L12 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS

```
1992:402735 CAPLUS
     117:2735
DN
ΤI
     Shoot regeneration from ***spinach*** ***hypocotyl***
       ***segments*** by short-term treatment with 5,6-dichloroindole-3-acetic
     Mii, M.; Nakano, M.; Okuda, K.; Iizuka, M.
ΑU
     Fac. Hortic., Chiba Univ., Chiba, 271, Japan
CS
     Plant Cell Reports (1992), 11(2), 58-61
SO
     CODEN: PCRPD8; ISSN: 0721-7714
DT
     Journal
     English
LA
=> d l12 1 ab
L12 ANSWER 1 OF 3 AGRICOLA
     Factors affecting shoot regeneration from hypocotyl segments of spinach
AB
     (Spinacia oleracea L.) were investigated. When explants were cultured on
     medium containing 10 mg/l IAA for 7 weeks, 3 out of 9 cultivars showed
     relatively high shoot regeneration response (15-35%). The other PGRs
     tested had no effect on shoot regeneration. However, the transfer of
     explants from auxin-containing medium to auxin-free medium 20 d after
     culture induced shoot formation from explants cultured on media containing
     each of the auxin sources tested individually. By applying this short term
     auxin treatment, more than 80% shoot regeneration was obtained on medium
     containing 5-20 mg/l 5,6-Cl2-IAA, compared to less than 30% with 10-20 \,
     mg/l IAA treatment.
=> s 112 and meristem?
L13
            0 L12 AND MERISTEM?
=> s agrobacterium and melon and meristem?
            3 AGROBACTERIUM AND MELON AND MERISTEM?
=> d l14 1-3
L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
AΝ
     2002:977962 CAPLUS
DN
     138:36240
TΤ
     Improved efficiency of regeneration of transgenic plants using
      ***meristematic***
                           or nodal tissue transformed with
       ***Agrobacterium***
     Goldman, Stephen L.; Rudrabhatla, Sairam V.
PΑ
     University of Toledo, USA
SO
     PCT Int. Appl., 84 pp.
     CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
                    KIND DATE
    PATENT NO.
                                         APPLICATION NO. DATE
     -----
                           _____
                                          -----
    WO 2002102979
PΙ
                     A2 20021227
                                         WO 2002-US18966 20020614
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
```

AN

```
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-298542P
                      Р
                            20010615
     US 2002-356563P
                       Р
                            20020211
L14
     ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
ΑN
     2002:158008 CAPLUS
DN
     136:211940
     Nucleic acid sequence of novel genetic vector and methods for plant gene
ΤI
     silencing
IN
     Baulcombe, David Charles; Martin-Hernandez, Ana Montserrat
     Plant Bioscience Limited, UK
PΑ
SO
     PCT Int. Appl., 72 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
     -----
                                          -----
PΙ
     WO 2002016622
                      A1
                            20020228
                                          WO 2001-GB3623
                                                           20010813
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2001078598
                      A5
                           20020304
                                          AU 2001-78598
                                                           20010813
PRAI GB 2000-20320
                      Α
                            20000817
     WO 2001-GB3623
                      W
                            20010813
RE.CNT 6
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
L14
AN
     2002:142895 CAPLUS
ĎΝ
     136:178987
     Stable transformation of multiple shoot cultures of plants
TI
     Chang, Yin-Fu; Zhong, Heng; Dunder, Erik Martin; Rouse, Sabrina Noel; Gu,
     Weining; Boudreau, Eric
     Syngenta Participations A.-G., Switz.
PA
SO
     PCT Int. Appl., 43 pp.
    CODEN: PIXXD2
DT
    Patent
    English
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ----
                           -----
                                          -----
PΙ
    WO 2002014523
                      A2
                           20020221
                                          WO 2001-EP9329
                                                           20010810
    WO 2002014523
                      A3
                           20030123
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
```

```
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2001089800
                      A5
                           20020225
                                         AU 2001-89800
                                                           20010810
    US 2002073445
                      Al
                           20020613
                                         US 2001-928614
                                                           20010813
PRAI US 2000-224934P
                      Р
                           20000811
    WO 2001-EP9329
                      W
                           20010810
```

=> d 114 1-3 ab

- L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
- Methods of efficiently transforming monocotyledonous and dicotyledonous plant tissue and regenerating plants with a very high yield of transgenic plants are described. The method uses ***Agrobacterium*** ***meristem*** transform root or apical that is then cultured under conditions that generate somatic embryogenesis. The time required for the prodn. of transgenic plants is significantly decreased, while the no. of transgenic plants is significantly increased. These increases are not dependent upon the use of super-virulent ***Agrobacterium*** The invention also relates to an improved technique for in vitro regeneration of mono- and di-cotyledonous plants in a suitable medium contg. a novel growth regulator regime that promotes cell elongation in the prodn. of numerous somatic embryos that are regenerable into fertile plants. Optimization expts. for the transformation of grasses and legumes using a .beta.-glucuronidase reporter gene are described. Efficient genotype-independent regeneration of transgenic corn is demonstrated.
- L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
 - Provided are insolated DNA vectors which may be based on ***Agrobacterium*** binary vectors. The present invention relates to recombinant, replicable, plant-viral based nucleic acid constructs, and methods of use thereof in silencing genes in plants. The vector comprising a plant active promoter, operably linked to a recombinant tobacco rattle virus (TRV) nucleic acid which may corresponds to all or part of TRV RNA 1. TRV RNA sequence encoding a TRV trans acting factor, and cis acting elements, which confer on the TRV nucleic acid transcript the ability to replicate in the cytoplasm of a plant cell, a heterologous nucleotide sequence which is foreign to said virus (which may be a cloning site, or a targeting sequence which is capable of down-regulating expression of a target gene); and a border sequences which permit the transfer of the transfer nucleotide sequence into a plant cell genome. Preferred vectors include pBTA.DELTA.MP.DELTA.16K or pBTA.DELTA.MP. Also provided are related materials and methods of use of such vectors e.g. to produce a cytoplasmically-replicating RNA which can be used to silence target genes in plants.
- L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
- AB Multiple shoot structures are induced from plant tissues (e.g., shoot apices or axillary buds on an artificial medium) to produce multiple shoot cultures. These multi-shoot cultures are then transformed by known transformation methods. Plants are subsequently regenerated from the transformed cells. Crops that may be efficiently transformed by this

method include plants normally recalcitrant to transformation such as sugar beet, sunflower, soybean, cotton, tobacco, tomato, peanuts, ***melons***, watermelon, squash, Brassica, and pepper. Thus, the apical or axillary ***meristems*** contg. shoot primodia, leaf primodia, young leaves, and a portion of hypocotyls are excised from germinating seedlings or plantlets of squash (Cucurbita pepo). They are maintained on SM medium, growth under light at 25.degree. and subcultured biweekly; the shoot tip explants are ready for transformation after the first subculture. ***Agrobacterium*** tumefaciens-mediated transformation efficiency using these multiple shoot cultures ranged from 1 to 5%.

=> FIL STNGUIDE COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 122.05 122.26 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -7.16 -7.16

FILE 'STNGUIDE' ENTERED AT 16:13:55 ON 10 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Apr 4, 2003 (20030404/UP).

=> file agricola biosis embase caplus COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.96 123.22 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -7.16

FILE 'AGRICOLA' ENTERED AT 16:23:21 ON 10 APR 2003

FILE 'BIOSIS' ENTERED AT 16:23:21 ON 10 APR 2003 COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'EMBASE' ENTERED AT 16:23:21 ON 10 APR 2003 COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved.

FILE 'CAPLUS' ENTERED AT 16:23:21 ON 10 APR 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> duplicate remove 15
DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'

```
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L5
L16
             81 DUPLICATE REMOVE L5 (23 DUPLICATES REMOVED)
=> 115 duplicate remove
L15 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
=> duplicate remove 115
PROCESSING COMPLETED FOR L15
              5 DUPLICATE REMOVE L15 (0 DUPLICATES REMOVED)
=> d l15 1-5
L15 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN
     2002:977962 CAPLUS
DN
     138:36240
TI
     Improved efficiency of regeneration of transgenic plants using
       ***meristematic***
                            or nodal tissue transformed with
       ***Agrobacterium***
     Goldman, Stephen L.; Rudrabhatla, Sairam V.
IN
PA
     University of Toledo, USA
SO
     PCT Int. Appl., 84 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                  KIND DATE
                                         APPLICATION NO. DATE
                     _ _ _ _
                           -----
                                          -----
PΤ
     WO 2002102979
                     A2
                            20021227
                                          WO 2002-US18966 20020614
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-298542P
                     ₽
                            20010615
     US 2002-356563P
                     Р
                            20020211
L15
    ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN
     2002:142895 CAPLUS
DN
     136:178987
ΤI
     Stable transformation of multiple shoot cultures of plants
     Chang, Yin-Fu; Zhong, Heng; Dunder, Erik Martin; Rouse, Sabrina Noel; Gu,
IN
     Weining; Boudreau, Eric
PΑ
     Syngenta Participations A.-G., Switz.
SO
     PCT Int. Appl., 43 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
```

```
KIND DATE
     PATENT NO.
                                          APPLICATION NO.
                     ----
                           -----
                                           -----
     WO 2002014523
                      A2
ΡI
                            20020221
                                           WO 2001-EP9329
                                                            20010810
     WO 2002014523
                      Α3
                            20030123
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2001089800
                       A5
                            20020225
                                         AU 2001-89800
                                                           20010810
     US 2002073445
                       Α1
                            20020613
                                          US 2001-928614
                                                           20010813
PRAI US 2000-224934P
                       Þ
                            20000811
     WO 2001-EP9329
                       W
                            20010810
L15
     ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN
     2000:264028 CAPLUS
     133:220335
DN
     Evaluation of gibberellin 20-oxidase and rolC genes for dwarfing
TΙ
     ornamental plants
AU
     Curtis, I. S.; Davey, M. R.; Hedden, P.; Phillips, A. L.; Ward, D. A.;
     Thomas, S. G.; Lowe, K. C.; Power, J. B.
CS
     Plant Science Division, School of Biological Sciences, University of
     Nottingham, Nottingham, NG7 2RD, UK
SO
     Current Plant Science and Biotechnology in Agriculture (1999), 36(Plant
     Biotechnology and In Vitro Biology in the 21st Century), 123-126
     CODEN: CPBAE2; ISSN: 0924-1949
     Kluwer Academic Publishers
PΒ
DT
     Journal
     English
LA
              THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 14
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS
L15
AN
     1999:549109 CAPLUS
DN
     131:166222
     A method for the production of transgenic plants using apical shoot tips
ΤI
     Trolinder, Norma L.; Koonce, Linda K.; Dever, Jane K.
IN
     Cotton Incorporated, USA
     PCT Int. Appl., 21 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
     -----
                                          -----
PΙ
     WO 9941975
                     A1 19990826
                                         WO 1999-US3517
                                                           19990218
            AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
            KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
            MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
            TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
```

```
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2321044
                      AA
                           19990826
                                        CA 1999-2321044 19990218
     AU 9926865
                      Α1
                           19990906
                                          AU 1999-26865
                                                          19990218
     AU 747514
                      B2
                           20020516
     EP 1056334
                      A1
                           20001206
                                        EP 1999-907133
                                                          19990218
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     JP 2002503487
                      T2
                           20020205
                                         JP 2000-532003
                                                          19990218
PRAI US 1998-75261P
                      P
                           19980219
     WO 1999-US3517
                      W
                           19990218
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 4
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN
     1999:286099 CAPLUS
DN
     130:292448
     In planta method for the production of transgenic plants using a
     needleless-hypodermic injection device for delivery of the transforming
     agent to floral tissues
IN
     Trolinder, Norma L.; Koonce, Linda
PΑ
     Cotton Incorporated, USA
     PCT Int. Appl., 34 pp.
     CODEN: PIXXD2
DT
     Patent
    English
LA
FAN.CNT 1
     PATENT NO.
                  KIND DATE
                                        APPLICATION NO. DATE
                                         -----
     WO 9920776 A1
                           19990429 WO 1998-US21627 19981019
PΙ
            AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
            KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
            MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
            TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    US 5994624
                          19991130 US 1997-953987
                     Α
                                                          19971020
    CA 2308702
                     AA
                           19990429
                                        CA 1998-2308702 19981019
    AU 9898019
                     A1
                           19990510
                                        AU 1998-98019
                                                          19981019
    AU 752717
                     B2
                           20020926
    ZA 9809517
                     Α
                           20000419
                                         ZA 1998-9517
                                                          19981019
    EP 1025247
                     A1
                                         EP 1998-952283
                           20000809
                                                          19981019
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
    JP 2001520049
                      T2
                           20011030
                                       JP 2000-517096
                                                          19981019
PRAI US 1997-953987
                      A
                           19971020
    WO 1998-US21627
                      W
                           19981019
             THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> FIL STNGUIDE
COST IN U.S. DOLLARS
```

FULL ESTIMATED COST

SINCE FILE

ENTRY

13.33

TOTAL

SESSION

136.55

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE

0.00 -7.16

FILE 'STNGUIDE' ENTERED AT 16:25:56 ON 10 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Apr 4, 2003 (20030404/UP).

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS FULL ESTIMATED COST	SINCE FILE ENTRY 0.24	TOTAL SESSION 136.79
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE	SINCE FILE ENTRY 0.00	TOTAL SESSION -7.16

STN INTERNATIONAL LOGOFF AT 16:28:13 ON 10 APR 2003

```
$\frac{2}{5}TN; HighlightOn= ***; HighlightOff=*** ;
Connecting via Winsock to STN
Welcome to STN International! Enter x:x
LOGINID: SSSPTA1600RKK
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
                     Welcome to STN International
NEWS 1
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Apr 08
                "Ask CAS" for self-help around the clock
NEWS 3 Jun 03 New e-mail delivery for search results now available
NEWS 4 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 5 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
                 now available on STN
NEWS 6 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 7 Sep 03 JAPIO has been reloaded and enhanced
NEWS 8 Sep 16 Experimental properties added to the REGISTRY file
NEWS 9 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 10 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11 Oct 24 BEILSTEIN adds new search fields
NEWS 12 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 13 Nov 18 DKILIT has been renamed APOLLIT
NEWS 14 Nov 25 More calculated properties added to REGISTRY
NEWS 15 Dec 04 CSA files on STN
NEWS 16 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 17 Dec 17 TOXCENTER enhanced with additional content
NEWS 18 Dec 17 Adis Clinical Trials Insight now available on STN
NEWS 19 Jan 29 Simultaneous left and right truncation added to COMPENDEX,
                 ENERGY, INSPEC
NEWS 20 Feb 13 CANCERLIT is no longer being updated
NEWS 21 Feb 24 METADEX enhancements
NEWS 22 Feb 24 PCTGEN now available on STN
NEWS 23 Feb 24 TEMA now available on STN
NEWS 24 Feb 26 NTIS now allows simultaneous left and right truncation
NEWS 25 Feb 26 PCTFULL now contains images
NEWS 26 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 27 Mar 19 APOLLIT offering free connect time in April 2003
NEWS 28 Mar 20 EVENTLINE will be removed from STN
NEWS 29 Mar 24 PATDPAFULL now available on STN
NEWS 30 Mar 24 Additional information for trade-named substances without
                 structures available in REGISTRY
NEWS 31 Mar 24
                 Indexing from 1957 to 1966 added to records in CA/CAPLUS
NEWS 32 Apr 11 Display formats in DGENE enhanced
NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
             MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
              AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS
             STN Operating Hours Plus Help Desk Availability
```

NEWS INTER General Internet Information

NEWS LOGIN Welcome Banner and News Items

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 14:03:40 ON 11 APR 2003

=> file agricola biosis embase caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'AGRICOLA' ENTERED AT 14:03:53 ON 11 APR 2003

FILE 'BIOSIS' ENTERED AT 14:03:53 ON 11 APR 2003 COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'EMBASE' ENTERED AT 14:03:53 ON 11 APR 2003 COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved.

FILE 'CAPLUS' ENTERED AT 14:03:53 ON 11 APR 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> duplicate remove l1
DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L1
L2 68 DUPLICATE REMOVE L1 (46 DUPLICATES REMOVED)

=> d l2 1-10 ti

- L2 ANSWER 1 OF 68 CAPLUS COPYRIGHT 2003 ACS
- TI Production of ***multiple*** ***shoots*** from thidiazuron-treated mature embryos and leaf-base/apical meristems of barley (Hordeum vulgare)
- L2 ANSWER 2 OF 68 CAPLUS COPYRIGHT 2003 ACS
- TI Novel ***multiple*** ***shoot*** proliferation and regeneration system for plants

- L2 ANSWER 3 OF 68 CAPLUS COPYRIGHT 2003 ACS
- TI Stable ***transformation*** of ***multiple*** ***shoot***
 cultures of plants
- L2 ANSWER 4 OF 68 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
- TI Genetic ***transformation*** by particle bombardment of cultivated jute, Corchorus capsularis L.
- L2 ANSWER 5 OF 68 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2
- TI Competence of oat (Avena sativa L.) shoot apical meristems for integrative ***transformation*** , inherited expression, and osmotic tolerance of transgenic lines containing hval.
- L2 ANSWER 6 OF 68 CAPLUS COPYRIGHT 2003 ACS
- TI Regeneration and ***transformation*** of a roadside tree Pittosporum tobira A.
- L2 ANSWER 7 OF 68 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 3
- TI Age, position in mother seedling, orientation, and polarity of the epicotyl segments of blackgram (Vigna mungo L. Hepper) determines its morphogenic response.
- L2 ANSWER 8 OF 68 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 4
- Culturing shoot-tip clumps of pearl millet (Pennisetum glaucum (L.) R. Br.) and optimal microprojectile bombardment parameters for transient expression.
- L2 ANSWER 9 OF 68 CAPLUS COPYRIGHT 2003 ACS
- TI Establishment of ***multiple*** ***shoot*** clumps from maize (Zea mays L.) and regeneration of herbicide-resistant transgenic plantlets
- L2 ANSWER 10 OF 68 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
- ${\tt TI}$ Plant regeneration from seedling explants of common bean (Phaseolous vulgaris L.).

=> d 12 3

- L2 ANSWER 3 OF 68 CAPLUS COPYRIGHT 2003 ACS
- AN 2002:142895 CAPLUS
- DN 136:178987
- TI Stable ***transformation*** of ***multiple*** ***shoot***
 cultures of plants
- IN Chang, Yin-Fu; Zhong, Heng; Dunder, Erik Martin; Rouse, Sabrina Noel; Gu,
 Weining; Boudreau, Eric
- PA Syngenta Participations A.-G., Switz.
- SO PCT Int. Appl., 43 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

PATENT NO. KIND DATE

APPLICATION NO. DATE

```
-----
                         -----
PΙ
    WO 2002014523
                   A2
                          20020221
                                       WO 2001-EP9329 20010810
    WO 2002014523
                    A3
                          20030123
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2001089800 A5 20020225
                                      AU 2001-89800 20010810
    US 2002073445
                    A1 20020613
                                       US 2001-928614
                                                        20010813
PRAI US 2000-224934P P
                         20000811
    WO 2001-EP9329 W
                         20010810
```

=> d 110 11-20 ti

L10 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> d l1 11-20 ti

- L1 ANSWER 11 OF 114 AGRICOLA
- TI Vicamine production in ***multiple*** ***shoot*** culture derived from hairy roots of Vinca minor.
- L1 ANSWER 12 OF 114 AGRICOLA
- TI Regeneration of pigeonpea (Cajanus cajan) from cotyledonary node via ***multiple*** ***shoot*** formation.
- L1 ANSWER 13 OF 114 AGRICOLA
- TI Stable ***transformation*** via particle bombardment in two different soybean regeneration systems.
- L1 ANSWER 14 OF 114 AGRICOLA
- TI Stable ***transformation*** of Phaseolus vulgaris via electric-discharge mediated particle acceleration.
- L1 ANSWER 15 OF 114 AGRICOLA
- TI High efficiency plant regeneration from cotyledons of watermelon (Citrullus vulgaris Schrad.).
- L1 ANSWER 16 OF 114 AGRICOLA
- TI Efficient shoot regeneration of Brassica campestris using cotyledon explants cultured in vitro.
- L1 ANSWER 17 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Age, position in mother seedling, orientation, and polarity of the epicotyl segments of blackgram (Vigna mungo L. Hepper) determines its morphogenic response.
- L1 ANSWER 18 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Competence of oat (Avena sativa L.) shoot apical meristems for integrative

- ***transformation*** , inherited expression, and osmotic tolerance of transgenic lines containing hval.
- L1 ANSWER 19 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Culturing shoot-tip clumps of pearl millet (Pennisetum glaucum (L.) R. Br.) and optimal microprojectile bombardment parameters for transient expression.
- L1 ANSWER 20 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI In vitro induction and enlargement of apical domes and formation of

 multiple ***shoots*** in finger millet, Eleusine coracana
 (L.)
- Gaertn and crowfoot grass, Eleusine indica (L.) Gaertn.
- => d l1 12 18 ab
- L1 ANSWER 12 OF 114 AGRICOLA
- AB Plant regeneration, which is the major limiting factor for ***transformation*** of Cajanus cajan, has been obtained via region of seedlings germinated on MS medium containing 2 mg 1-1 6-benzylaminopurine. A mass of ***multiple*** ***shoot*** formed at the axillary bud region of the cotyledonary node of the seedlings within two weeks. The cotyledonary node along with the mass of shoot-initials excised from the seedling, continued to form new shoot-initials on MS medium containing 6-benzylaminopurine (2 mg l-1) and supplemented topically with indole-3-acetic acid. The formation of new shoot-initials was also observed from the cotyledonary nodal explant, after cutting off its surface layers to completely remove the pre-existing shoot-initials and culturing it on 6-benzylaminopurine (2 mg 1-1) containing medium. The shoots elongated rapidly on basal MS medium and rooted efficiently in MS medium supplemented with indole-3-butyric acid (0.5 mg l-1). The procedure described is efficient, and highly reproducible and a common response was observed for all the six varieties tested.
- L1 ANSWER 18 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- Three oat (Avena sativa L.) cultivars have been successfully AB ***transformed*** using an efficient and reproducible in vitro culture system for differentiation of ***multiple*** ***shoots*** from shoot apical meristems. The ***transformation*** was performed using microprojectile bombardment with two plasmids (pBY520 and pAct1-D) containing linked (hval-bar) and non-linked (gus) genes. The hval and bar genes cointegrated with a frequency of 100% as expected, and 61.6% of the transgenic plants carried all three genes. Molecular and biochemical analyses in R0, R1 and R2 progenies confirmed stable integration and expression of all transgenes. Localization of the GUS protein in R0 and R1 plants revealed that high-expression of gus occurred in vascular tissues and in the pollen grains of mature flowers. The constitutive expression of HVA1 protein was observed at all developmental stages of transgenic plants, and was particularly stronger during the early seedling stages. R2 progeny of five independent transgenic lines was tested in vitro for tolerance to osmotic (salt and mannitol) stresses. As compared to non-transgenic control plants, transgenic plants maintained a higher growth and showed significantly (P<0.05) increased tolerance to stress conditions. Less than 10% of transgenic plants showed symptoms of wilting

or death of leaves and, when these symptoms present were delayed in transgenic plants as compared to 80% of non-transgenic plants, either wilted or died. These symptoms confirmed the increased in vitro tolerance in hval-expressing transgenic plants to non-transgenic plants, providing strong evidence that the HVA1 protein may play an important role in the protection of oats against salinity and possible water-deficiency stress conditions.

=> d l1 19 ti ab

- L1 ANSWER 19 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Culturing shoot-tip clumps of pearl millet (Pennisetum glaucum (L.) R. Br.) and optimal microprojectile bombardment parameters for transient expression.
- AB Microprojectile bombardment and transient expression of the reporter gene, beta-glucuronidase (GUS) in a novel target tissue, ***multiple*** ***shoot*** -tip clumps of pearl millet (Pennisetum glaucum (L.) R. Br.) is reported here. The ***multiple*** ***shoot*** -tip clumps were developed in vitro from shoot-apices of seedlings. Using this method, the apical meristems along with the germline cells were easily exposed for bombardment without loss of viability. Further growth of the ***multiple*** ***shoot*** -tip clumps was not substantially

affected

by microprojectile bombardment. Transient expression of beta-glucuronidase gene was detected in the form of blue ***transformed*** cell sectors in the bombarded tissue by an in situ enzyme assay. The blue sectors were used as convenient criteria to study several factors affecting gene transfer efficiency. Optimal conditions for efficient transient expression of the GUS gene have been defined to aid future strategies of genetic engineering in pearl millet with agronomically important genes.

=> d l1 15 ti ab

- L1 ANSWER 15 OF 114 AGRICOLA
- TI High efficiency plant regeneration from cotyledons of watermelon (Citrullus vulgaris Schrad.).
- Cotyledons of various ages from seedlings of eight watermelon (Citrullus AΒ vulgaris) cultivars were cultured on MS medium supplemented with different combinations of phytohormones. High frequency shoot regeneration (60.0-92.0%) was induced from 5-day-old cotyledons of cultivars cultured on MS medium containing 5.0 mg/l 6-benzylaminopurine (BA) and 0.5 mg/l indole-3-acetic acid (IAA). ***Multiple*** ***shoot*** elongated on MS medium containing 0.2 mg/l kinetin (KT) and 5-10 shoots per explant could be recovered depending on the cultivars. Elongated shoots rooted on MS medium with 0.1 mg/l alpha-naphthalene acetic acid (NAA). Zeatin riboside (ZT) had a similar efficiency as BA in shoot induction, and it was significantly more functional than 2-isopentenyladenine (2iP) or kinetin (KT). Cotyledons from 5-day-old seedlings were the most responsive to shoot induction.

=> d l1 21-30 ti

- L1 ANSWER 21 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Genetic ***transformation*** by particle bombardment of cultivated

jute, Corchorus capsularis L.

- L1 ANSWER 22 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Enhanced regeneration of tomato and pepper seedling explants for Agrobacterium-mediated ***transformation*** .
- L1 ANSWER 23 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Regeneration and shoot multiplication of Macadamia tetraphylla L. Johnson.
- L1 ANSWER 24 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Agrobacterium-mediated ***transformation*** of a Dendrobium orchid with the class 1 knox gene DOH1.
- L1 ANSWER 25 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI In vitro propagation of loblolly pine via direct somatic organogenesis from mature cotyledons and hypocotyls.
- L1 ANSWER 26 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI DOH1, a class 1 knox gene, is required for maintenance of the basic plant architecture and floral transition in orchid.
- L1 ANSWER 27 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Efficient organogenesis of an Australian passionfruit hybrid (Passiflora edulis X Passiflora edulis var. flavicarpa) suitable for gene delivery.
- L1 ANSWER 28 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Transgenic Trifolium repens with foliage accumulating the high sulphur protein, sunflower seed albumin.
- L1 ANSWER 29 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI In vitro regeneration and Agrobacterium mediated ***transformation*** in gladiolus.
- L1 ANSWER 30 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Agrobacterium tumefaciens-mediated ***transformation*** and transgenic-plant regeneration of onion (Allium cepa L.

=> d l1 31-40 ti

- L1 ANSWER 31 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Plant regeneration from mature embryo-derived callus of Australian rice (Oryza sativa L.) varieties.
- L1 ANSWER 32 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI In vitro shoot multiplication of Macadamia tetraphylla L. Johnson.
- L1 ANSWER 33 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Regeneration of fertile plants from isolated zygotes of rice (Oryza sativa.
- L1 ANSWER 34 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Embryogenic callus formation and plant regeneration from leaf base segments of barley (Hordeum vulgare L.
- L1 ANSWER 35 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Insertion of the maize transposable element Ac into soybean (Glycine max

- L. Merr.) by Agrobacterium mediated ***transformation*** method.
- L1 ANSWER 36 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Plantlet regeneration from decapitated embryonic axes of pigeonpea (Cajanus cajan (L.) Millsp.
- L1 ANSWER 37 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Comparison of shoot regeneration potential from seedling explants of Austatralian cauliflower (Brassica oleracea var. botrytis) varieties.
- L1 ANSWER 38 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Introduction and expression of marker genes in sandalwood (Santalum album L.) following Agrobacterium-mediated ***transformation*** .
- L1 ANSWER 39 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- In vitro plant regeneration from different seedling explants of blackgram (Vigna mungo (L.) Hepper) via organogenesis.
- L1 ANSWER 40 OF 114 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Anthurium roots for micropropagation and Agrobacterium tumefaciens-mediated gene transfer.
- => s l1 and melon or beet or sunflower
- L3 107549 L1 AND MELON OR BEET OR SUNFLOWER
- => s l1 and (melon or beet or sunflower)
- L4 3 L1 AND (MELON OR BEET OR SUNFLOWER)
- => d 14 1-3 ti
- L4 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Transgenic Trifolium repens with foliage accumulating the high sulphur protein, ***sunflower*** seed albumin.
- L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
- TI Stable ***transformation*** of ***multiple*** ***shoot***
 cultures of plants
- L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
- TI Transgenic Trifolium repens with foliage accumulating the high sulphur protein, ***sunflower*** seed albumin

=> d 14 1 ti ab

- L4 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Transgenic Trifolium repens with foliage accumulating the high sulphur protein, ***sunflower*** seed albumin.
- AB With the aim of increasing the rumen-protected level of the sulphur amino acids cysteine and methionine in Trifolium repens, we introduced the coding sequence of the ***sunflower** seed albumin (SSA) into T. repens by Agrobacterium tumefaciens-mediated ***transformation***. The SSA gene was modified such that the protein would be localized to the endoplasmic reticulum (ER). Four different T-DNA constructions all containing the SSA gene driven by either the promoter of a gene encoding the small subunit of ribulose bisphosphate carboxylase (Rubisco) from

Arabidopsis thaliana (Assu), the promoter of the gene encoding the small subunit of Rubisco of Medicago sativa (Lssu), or the Cauliflower Mosaic Virus 35S promoter (CaMV35S), were transferred to T. repens cv. Haifa. Transgenic T0-plants and inter-transgenic hybrids were analyzed for the level of SSA accumulation in the leaves by western blotting. The highest observed level of SSA accumulation was 0.1% of total extractable leaf protein. We observed that the promoter had a substantive effect on the level of SSA accumulation with Assu > CaMV35S > Lssu. Results from the inter-transgenic hybrids showed that the capacity to synthesize SSA was inherited. However the level of SSA accumulation in the leaves generally appears not to be additive with extra transgenic loci. During this work, we attempted to improve the efficiency of A. tumefaciens-mediated ***transformation*** of T. repens using the SAAT-method (Sonication Assisted Agrobacterium-mediated ***Transformation***) on cotyledons of T. repens. T-DNA transfer was in general not enhanced by sonication compared to traditional A. tumefaciens-mediated ***transformation*** Furthermore, Southern blot analyses of plants regenerated from the same cotyledon after A. tumefaciens treatment and under selection, indicated that ***multiple*** ***shoots*** were usually derived from the ***transformation*** event. We concluded from these results that only one plant from each A. tumefaciens-treated cotyledon should be taken

=> s l1 and unexpected

L5 0 L1 AND UNEXPECTED

=> s l1 and unpredictable

L6 0 L1 AND UNPREDICTABLE

to avoid transgenic clones.

=> s l1 and problem?

L7 0 L1 AND PROBLEM?

=> s l1 and result?

L8 28 L1 AND RESULT?

=> d 18 1-10 ti

- L8 ANSWER 1 OF 28 AGRICOLA
- TI In vitro propagation of loblolly pine via direct somatic organogenesis from mature cotyledons and hypocotyls.
- L8 ANSWER 2 OF 28 AGRICOLA
- TI Anthurium roots for micropropagation and Agrobacterium tumefaciens-mediated gene transfer.
- L8 ANSWER 3 OF 28 AGRICOLA
- TI Efficient Agrobacterium-mediated ***transformation*** of Arabidopsis thaliana using the bar gene as selectable marker.
- L8 ANSWER 4 OF 28 AGRICOLA
- TI Vicamine production in ***multiple*** ***shoot*** culture derived from hairy roots of Vinca minor.
- L8 ANSWER 5 OF 28 AGRICOLA
- TI Stable ***transformation*** via particle bombardment in two different soybean regeneration systems.

- L8 ANSWER 6 OF 28 AGRICOLA
- TI Efficient shoot regeneration of Brassica campestris using cotyledon explants cultured in vitro.
- L8 ANSWER 7 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- In vitro propagation of loblolly pine via direct somatic organogenesis from mature cotyledons and hypocotyls.
- L8 ANSWER 8 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Transgenic Trifolium repens with foliage accumulating the high sulphur protein, sunflower seed albumin.
- L8 ANSWER 9 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Plant regeneration from mature embryo-derived callus of Australian rice (Oryza sativa L.) varieties.
- L8 ANSWER 10 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
- TI Embryogenic callus formation and plant regeneration from leaf base segments of barley (Hordeum vulgare L.
- => d 18 4 ti ab
- L8 ANSWER 4 OF 28 AGRICOLA
- TI Vicamine production in ***multiple*** ***shoot*** culture derived from hairy roots of Vinca minor.
- Characteristics of regenerated plants obtained from hairy roots (Ri-AΒ ***transformed*** plants) of Vinca minor L., a producer of a pharmaceutically important indole alkaloid, vincamine, were investigated. A previously established Ri- ***transformed*** clone, Vm-101, proliferates rapidly in vitro, displays a high degree of lateral branching and rapid shoot elongation and has a growth index 2.5 times that of an untransformed plant. The addition of 2.2 micromolar benzyladenine to the culture medium increased the shoot number but did not decrease the growth index. Vincamine content in the leaves of in vitro-cultured Vm-101 was twice that in the cultured untransformed plant. These ***results*** suggest that ***multiple*** ***shoot*** culture of Ri-***transformed*** plants may be an excellent tool for in vitro

vincamine production.

---Logging off of STN---

Executing the logoff script...

=> LOG Y

=>

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

47.53 47.74

STN INTERNATIONAL LOGOFF AT 14:17:16 ON 11 APR 2003